Fresnel lens and projection display device using one such lens

Abstract

5

10

15

A Fresnel lens comprises at least one first prism (28) and one second prism (34). Each prism has a first side (30, 36) and a second side (32, 38) which forms with a main axis (AA') an angle greater than that formed by the first side (30, 36) and the main axis (AA'). Conventionally, the second side (32) of the first prism (28) collimates the light received (R1) from a light source in line with the main axis (AA'). In order to improve the optical effectiveness, the second side (38) of the second prism (34) transmits the light received (R2) from the source in a first direction (R2') slightly different from the main axis (AA').

Figure 3